# Curriculum Vitae

**GONG, JIE**

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## EDUCATION

2005.8 – 2009.12 Ph.D. in Atmospheric Sciences, School of Marine and Atmospheric Sciences, Stony Brook University (Advisor: Prof. Marvin A. Geller)
Thesis topic: Characteristics of two gravity wave sources in the US high-resolution radiosonde data

2001.9– 2005.6 B.S., Atmospheric Sciences, School of Physics, Peking University (PKU)

## RESEARCH INTERESTS

- **Gravity Wave Sources and Propagation Properties**
- **Parameterizations of Gravity Wave Drag into General Circulation Models**
- **Dynamic Coupling between the Troposphere and the Lower Stratosphere**

## ACADEMIC RESEARCH EXPERIENCE

2010.3 – Present Postdoc scholar, Jet Propusion Laboratory, California Institute of Technology, Pasadena, CA

Conducting research on retrieving information of gravity wave variance and propagation from AIRS data

2006 – 2009 Ph.D. thesis project on Gravity Wave Sources and Propagation Properties, Stony Brook University, NSF funding ATM – 0413747

2004 – 2005 Project on Modified Zonal Index for Westly Belt, the Monsoon and Environment Research Group (MERG), PKU

2004 – 2005 Project on creating database and data analysis for Automatic Weather Station (AWS), Dept. of Atmospheric Sciences, PKU

## AWARDS AND SCHOLARSHIPS

2006.2 – 2009.12 Full Research Assistant Scholarship, Stony Brook Univ.

2005.9 – 2006.1 Full Teaching Assistant Scholarship, Stony Brook Univ.

2004 Mary-Kay Scholarship & Leading Honored Students of PKU

2003 Wu-Si Scholarship & Leading Honored Students of PKU

2002 Honored Student of PKU

## PEER-REVIEWED PAPERS

**Gong, J.** and Geller, M. A. (2010), Vertical fluctuation energy in US high vertical resolution radiosonde data as an indicator of convective gravity wave sources, *Journal of Geophysical Research,* doi: 10.1029/2009JD12265, in press

Geller, M. A. and **Gong, J.** (2010), Gravity wave kinetic, potential and vertical fluctuation energies as indicators of different frequency gravity waves, *Journal of Geophysical Research,* doi: 10.1029/2009JD012266, in press

**Gong, J.**, Geller, M. A. and Wang, L. (2008), Source spectra information derived from US high-resolution radiosonde data, *Journal of Geophysical Research,* **113**, D10106, doi: 10.1029/2007JD009252

## CONFERENCE PRESENTATIONS

**Gong, J.,** D. L. Wu and S. D. Eckermann (*talk*, 2010), Gravity wave properties and propagation derived from AIRS radiance variances, AIRS spring science meeting, April 21 – 23, 2010, Pasadena, CA

**Gong, J.** and M. A. Geller (*talk*, 2009), Convective sources of gravity waves from US high-resolution radiosonde data, *AGU joint Assembly,* May. 24 – 27, 2009, Toronto, Canada (substituted by M.A. Geller as the presenter)

**Gong, J.** and M. A. Geller (*talk*, 2009), Identifications and climatology of convective sources for generating gravity waves in the ascent rate profiles in US high-resolution radiosonde data, *AMS annual meeting,* Jan. 10 – 16, 2009, Phoenix, AZ

**Gong, J.**, Geller, M. A. and Wang, L. (*poster*, 2008), Source spectra information derived from US high-resolution radiosonde data, *SPARC workshop on gravity wave momentum budget*, Mar. 26 - 27, 2008, Toronto, Canada

**Gong, J.** and Geller, M.A. (*poster*, 2008), Indications of convective and spontaneous emission sources for gravity waves from US high-resolution radiosonde data, *SPARC workshop on gravity wave momentum budget*, Mar. 26 – 27, 2008, Toronto, Canada

## PROFESSIONAL SERVICES

Reviewer of Journal of Geophysical Research

## WORKING EXPERIENCE AND APPOINTMENTS

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|---|---|
| 2006.1 – 2009.12 | Research assistant of Prof. Marvin Geller, Stony Brook Univ. |
| 2008. 2 – 2008. 5 | Teaching Practicum of Advanced Atmospheric Dynamics for undergraduates (ATM 346), and Atmospheric Dynamics for graduates (MAR 594), Stony Brook Univ. |
| 2005.9 – 2006.1 | Teaching assistant of Synoptic Meteorology (ATM 347), Stony Brook Univ. |
| 2001.9– 2005.6 | Vice-monitor of the undergraduate class of Department of Atmospheric Sciences, School of Physics, PKU |

## TECHNOLOGIES

**Operating Systems:** Linux, Unix, Mac, Windows

**Languages:** Fortran, IDL, Matlab, GrADs, Shell scripting, LaTeX